## **AMENDMENTS TO THE CLAIMS:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

- 1. (Currently Amended) A process for reducing NO<sub>x</sub> emissions in a gaseous combustion effluent stream containing oxides of nitrogen NO and/or NO<sub>2</sub> and converting the oxides to nitric acid comprising:
- a) adding hydrogen peroxide to the effluent stream in sufficient amounts to generate nitric acid by first stage reactions as follows:

$$2NO + H_2O_2 + O_2 ----> 2HNO_3$$
  
 $2NO_2 + H_2O_2 ----> 2HNO_3$   
 $2NO + 2NO_2 + O_2 + 2H_2O_2 ---> 4HNO_3$ .

2. (Original) The process of claim 1 and further comprising, after nitric acid is generated, sufficient amounts of potassium hydroxide are added to the effluent stream to generate potassium nitrate in second stage reactions as follows:

- 3. (Original) The process of claim 1 wherein the hydrogen peroxide is added in aerosol form.
- 4. (Original) The process of claim 2 wherein the potassium hydroxide is added in particulate form.

- 5. (Original) The process of claim 1 wherein  $NO_x$  emissions are reduced to a level below 40 ppm.
- 6. (Currently Amended) A process for reducing NO<sub>x</sub> emissions in a gaseous combustion effluent stream containing oxides of nitrogen NO and/or NO<sub>2</sub> and converting the oxides to nitric acid comprising the steps of:
- a) adding hydrogen peroxide in aerosol form to the effluent stream in sufficient amounts to generate nitric acid by first stage reactions as follows:

$$2NO + H_2O_2 + O_2$$
 ----->  $2HNO_3$   
 $2NO_2 + H_2O_2$  ---->  $2HNO_3$   
 $2NO + 2NO_2 + O_2 + 2H_2O_2$  --->  $4HNO_3$ ; and thereafter

b) adding sufficient potassium hydroxide in particulate form to the stream to generate potassium nitrate in second stage reactions as follows:

$$2HNO_3 + 2KOH$$
 ----->  $2KNO_3 + 2H_2O$   $4HNO_3 + 4KOH$  ---->  $4KNO_3 + 4H_2O$ .

- 7. (Original) The process of claim 6 wherein  $NO_x$  emissions are reduced to a level below 40 ppm.
- 8. (Currently Amended) A process for reducing NO<sub>x</sub> emissions in a gaseous combustion effluent stream from a land-based gas turbine containing <u>oxides of nitrogen</u> NO and/or NO<sub>2</sub> and converting the oxides to nitric acid comprising the steps of:
- a) adding hydrogen peroxide to the effluent stream in sufficient amounts to generate nitric acid by first stage reactions as follows:

$$2NO + H_2O_2 + O_2$$
 ----->  $2HNO_3$   
 $2NO_2 + H_2O_2$  ---->  $2HNO_3$   
 $2NO + 2NO_2 + O_2 + 2H_2O_2$  --->  $4HNO_3$ ; and thereafter

b) adding sufficient potassium hydroxide to the stream to generate potassium nitrate in second stage reactions as follows:

$$2HNO_3 + 2KOH$$
 ----->  $2KNO_3 + 2H_2O$   $4HNO_3 + 4KOH$  ---->  $4KNO_3 + 4H_2O$ .

- 9. (Original) The process of claim 8 wherein the hydrogen peroxide is added in aerosol form.
- 10. (Original) The process of claim 8 wherein the potassium hydroxide is added in particulate form.
- 11. (Original) The process of claim 8 wherein  $NO_x$  emissions are reduced to a level below 40 ppm.